What is claimed is:

1. An AC plane discharge plasma display panel comprising:

a front substrate;

a rear substrate;

a sealing portion for encapsulating said front substrate and said rear substrate at a peripheral edge portion thereof to seal a discharge gas therein;

column ribs and row ribs for defining pixel cells in a column direction and in a row direction, respectively, to thereby define the pixel cells in a matrix; and

plane discharge electrodes having a display electrode portion and a bus electrode portion, at least part of the display electrode portion of said plane discharge electrodes having a notched portion or a cut-away portion between pixel cells adjacent to each other in the row direction, said plane discharge electrodes having a pair of a sustain electrode and a scan electrode placed in one pixel cell, and for neighboring pixel cells arranged in the column direction, sustain electrodes and scan electrodes are disposed to allow respective sustain electrodes and scan electrodes to be adjacent to each other between neighboring pixel cells.

2. The plasma display panel according to claim 1, wherein neighboring sustain electrodes or sustain-side bus electrodes for neighboring pixel cells arranged in the column direction are electrically connected to each other in the panel.

3. The plasma display panel according to claim 1,

wherein neighboring scan electrodes or scan-side bus electrodes for neighboring pixel cells arranged in the column direction are electrically connected to each other in the panel.

4. A method for fabricating the plasma display panel according to claim 1, comprising the steps of:

encapsulating said rear substrate and said front substrate in a vacuum, and

sealing a discharge gas in the panel continually thereafter without exposing the interior of the panel to the atmosphere.

5. The plasma display panel according to claim 1, further comprising lattice-shaped ribs formed on said rear substrate.

6. The plasma display panel according to claim 5, wherein a gap for allowing a discharge gas to pass therethrough is provided between the top of the lattice-shaped rib and said front substrate.

7. The plasma display panel according to claim 6, further comprising projected portions provided on intersections of lattice-shaped ribs of said front substrate or said rear substrate, said intersections corresponding to those of lattice-shaped ribs of said rear substrate.

8. The plasma display panel according to claim 7, wherein said projected portions define scan-side bus electrodes and sustain-side bus electrodes or scan electrodes and sustain electrodes between pixel cells adjacent to each other in the row direction.

9. The plasma display panel according to claim 6, further comprising recessed portions provided on intersections of lattice-shaped ribs of said front substrate or said rear substrate, said intersections corresponding to those of lattice-shaped ribs of said rear substrate.

10. The plasma display panel according to claim 9, further comprising rib portions other than said recessed portions defining at least scan electrodes and sustain electrodes between pixel cells adjacent to each other in the column direction.

11. The plasma display panel according to claim 6, further comprising horizontal barrier walls having a thickness of 2 to 50 μm between pixel cells, said horizontal barrier walls being formed in parallel to bus electrodes.

12. The plasma display panel according to claim 11, wherein said horizontal barrier wall is formed of a material having a dielectric constant lower than that of the insulating layer.

13. The plasma display panel according to claim 11, wherein said horizontal barrier wall is placed only on one of the sustain electrodes or the scan electrodes between pixel cells extending in the longitudinal column direction.

14. The plasma display panel according to claim 11, wherein said horizontal barrier walls on the sustain electrode and the scan electrode have different widths.

15. The plasma display panel according to claim 11, further comprising an extended portion formed orthogonal to the longitudinal direction of the horizontal barrier wall,

said extended portion being disposed between pixel cells adjacent to each other in the longitudinal row direction.

16. The plasma display panel according to claim 6, further comprising lattice-shaped ribs formed on the rear substrate, wherein a rib portion extending in the longitudinal row direction for defining pixel cells is higher than a rib portion extending in the longitudinal column direction for defining pixel cells.

17. The plasma display panel according to claim 11, wherein a bus electrode constituting the plane discharge electrode does not overlap the horizontal barrier wall but overlaps the rib.

18. The plasma display panel according to claim 11, wherein a bus electrode constituting the plane discharge electrode does not overlap the rib but overlaps the horizontal barrier.

19. The plasma display panel according to claim 11, wherein a bus electrode constituting the plane discharge electrode is located so as to overlap the horizontal barrier wall and the rib.

20. The plasma display panel according to claim 6, wherein the bus electrode has a thickness of 10 to 50 μm, and the thickness of the bus electrode causes a raised portion of thickness 2 to 50 μm to be formed on the surface of the insulating layer.

21. The plasma display panel according to claim 1, comprising a metal electrode connecting the sustain electrodes each other.

22. The plasma display panel according to claim 1, comprising a transparent electrode connecting the sustain electrodes each other.

23. The plasma display panel according to claim 1, wherein the sustain electrodes are connected to each other to act as an integrated common bus electrode.

24. The plasma display panel according to claim 23, wherein resistance of the common bus electrode is 1/3 to 1/12 of that of the scan-side bus electrode.

25. The plasma display panel according to claim 23, wherein the bus electrode has a thickness of 10 to 50 μm, and the thickness of the bus electrode causes a raised portion of thickness 2 to 50 μm to be formed on the surface of the insulating layer.

26. The plasma display panel according to claim 1, comprising a metal electrode connecting the scan electrodes each other.

27. The plasma display panel according to claim 1, comprising a transparent electrode connecting the scan electrodes each other.

28. The plasma display panel according to claim 1, wherein the scan electrodes are connected to each other to act as an integrated common bus electrode.

29. The plasma display panel according to claim 28, wherein resistance of the common bus electrode is 1/3 to 1/12 of that of the sustain-side bus electrode.

30. The plasma display panel according to claim 28, wherein the bus electrode has a thickness of 10 to 50 μm,

and the thickness of the bus electrode causes a raised portion of thickness 2 to 50 μm to be formed on the surface of the insulating layer.

31. The plasma display panel according to claim 1, wherein the distance between the neighboring scan electrodes or the neighboring scan-side bus electrodes on vertically neighboring pixel cells is 20 to 200 μm.

32. The plasma display panel according to claim 1, wherein the distance between the neighboring sustain electrodes or the neighboring sustain-side bus electrodes on vertically neighboring pixel cells is 20 to 200 μm.

33. The plasma display panel according to claim 1, wherein the scan electrodes of neighboring pixel cells overlap each other being electrically insulated.

34. The plasma display panel according to claim 1, wherein the sustain electrodes of neighboring pixel cells overlap each other being electrically insulated.

35. The plasma display panel according to claim 1, comprising a notched or cut-away end portion of a display electrode portion disposed in the row direction, said notched or cut-away end portion being spaced apart by 20 to 70 μm from a head portion of a rib disposed in the column direction.

36. The plasma display panel according to claim 1, wherein the sustain electrode has a portion, reduced in width, for connecting to the sustain-side bus electrode.

37. The plasma display panel according to claim 1, wherein the plane discharge electrode is constructed so as

to allow pixel cells disposed in the longitudinal column direction to have centers of light emission at equal intervals.

38. The plasma display panel according to claim 1, comprising a horizontal black stripe disposed between plane discharge electrodes or in the row direction including the plane discharge electrode.

39. The plasma display panel according to claim 38, wherein said horizontal black stripes, all having the same width, are disposed at equal intervals in the column direction to be vertically symmetric with each other in each pixel cell.

40. The plasma display panel according to claim 38, wherein a horizontal black stripe, a horizontal first stripe made up of a scan electrode having a black or gray display side, and a horizontal second stripe made up of a black or gray common bus electrode have the same width and are disposed at equal intervals in the column direction.

41. The plasma display panel according to claim 38, wherein said scan electrodes and sustain electrodes are formed on said substrate, and said horizontal black stripes are formed on the scan electrode and the sustain electrode.

42. The plasma display panel according to claim 41, wherein a hole or notch is formed on the horizontal black stripe to ensure electrical connection of the scan electrode or the sustain electrode to the bus electrode.